F 13

```
UUU         UUU  EEEEEEEEEEEEEEE  TTTTTTTTTTTTTTT  PPPPPPPPPPPP        SSSSSSSSSSSS  YYY         YYY
UUU         UUU  EEEEEEEEEEEEEEE  TTTTTTTTTTTTTTT  PPPPPPPPPPPP        SSSSSSSSSSSS  YYY         YYY
UUU         UUU  EEEEEEEEEEEEEEE  TTTTTTTTTTTTTTT  PPPPPPPPPPPP        SSSSSSSSSSSS  YYY         YYY
UUU         UUU  EEE                    TTT        PPP         PPP  SSS              YYY         YYY
UUU         UUU  EEE                    TTT        PPP         PPP  SSS              YYY         YYY
UUU         UUU  EEE                    TTT        PPP         PPP  SSS              YYY         YYY
UUU         UUU  EEE                    TTT        PPP         PPP  SSS                 YYY   YYY
UUU         UUU  EEE                    TTT        PPP         PPP  SSS                 YYY   YYY
UUU         UUU  EEE                    TTT        PPP         PPP  SSS                 YYY   YYY
UUU         UUU  EEEEEEEEEEEE           TTT        PPPPPPPPPPPP        SSSSSSSSS           YYY
UUU         UUU  EEEEEEEEEEEE           TTT        PPPPPPPPPPPP        SSSSSSSSS           YYY
UUU         UUU  EEEEEEEEEEEE           TTT        PPPPPPPPPPPP        SSSSSSSSS           YYY
UUU         UUU  EEE                    TTT        PPP                          SSS        YYY
UUU         UUU  EEE                    TTT        PPP                          SSS        YYY
UUU         UUU  EEE                    TTT        PPP                          SSS        YYY
UUU         UUU  EEE                    TTT        PPP                          SSS        YYY
UUU         UUU  EEE                    TTT        PPP                          SSS        YYY
UUU         UUU  EEE                    TTT        PPP                          SSS        YYY
UUUUUUUUUUUUUUU  EEEEEEEEEEEEEEE        TTT        PPP              SSSSSSSSSSSS           YYY
UUUUUUUUUUUUUUU  EEEEEEEEEEEEEEE        TTT        PPP              SSSSSSSSSSSS           YYY
UUUUUUUUUUUUUUU  EEEEEEEEEEEEEEE        TTT        PPP              SSSSSSSSSSSS           YYY
```

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                                                       G  3
**FILE**ID**SATSSS78







  SSSSSSSS    AAAAAA    TTTTTTTTTT    SSSSSSSS    SSSSSSSS    SSSSSSSS  77777777      888888
  SSSSSSSS    AAAAAA    TTTTTTTTTT    SSSSSSSS    SSSSSSSS    SSSSSSSS  77777777      888888
SS          AA      AA      TT      SS          SS          SS                  77  88      88
SS          AA      AA      TT      SS          SS          SS                  77  88      88
SS          AA      AA      TT      SS          SS          SS                  77  88      88
SS          AA      AA      TT      SS          SS          SS                  77  88      88
  SSSSSS    AA      AA      TT        SSSSSS      SSSSSS      SSSSSS          77      888888
  SSSSSS    AA      AA      TT        SSSSSS      SSSSSS      SSSSSS          77      888888
        SS  AAAAAAAAAA      TT              SS          SS          SS      77      88      88
        SS  AAAAAAAAAA      TT              SS          SS          SS      77      88      88
        SS  AA      AA      TT              SS          SS          SS    77        88      88      ....
        SS  AA      AA      TT              SS          SS          SS    77        88      88      ....
SSSSSSSS    AA      AA      TT      SSSSSSSS    SSSSSSSS    SSSSSSSS    77            888888        ....
SSSSSSSS    AA      AA      TT      SSSSSSSS    SSSSSSSS    SSSSSSSS    77            888888        ....

LL            IIIIII      SSSSSSSS
LL            IIIIII      SSSSSSSS
LL              II      SS
LL              II      SS
LL              II      SS
LL              II      SS
LL              II        SSSSSS
LL              II        SSSSSS
LL              II              SS
LL              II              SS
LL              II              SS
LL              II              SS
LLLLLLLLLL    IIIIII    SSSSSSSS
LLLLLLLLLL    IIIIII    SSSSSSSS
```

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```
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```

```
0000          .TITLE  SATSSS78 SATS SYSTEM SERV TESTS  $LK/ULWSET (SUCC S.C.)
0000          .IDENT  'V04-000'
0000
0000    ;
0000    ;****************************************************************************
0000    ;*                                                                          *
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0000    ;*                                                                          *
0000    ;*                                                                          *
0000    ;****************************************************************************
0000    ;
0000
0000    ;++
0000    ; FACILITY:     SYSTST (SATS SYSTEM SERVICE TESTS)
0000    ;
0000    ; ABSTRACT:
0000    ;
0000    ;               THIS MODULE CONTAINS SUBROUTINES WHICH, WHEN LINKED
0000    ; WITH SUCCOMMON.OBJ, FORM TEST MODULE SATSSS78 TO TEST SUCCESSFUL
0000    ; OPERATION OF THE $LK/ULWSET SYSTEM SERVICES. EACH SERVICE IS INVOKED
0000    ; UNDER VARIOUS INPUT CONDITIONS WITH VARYING INPUT PARAMETERS. ONLY
0000    ; SUCCESSFUL STATUS CODES ARE EXPECTED IN THIS TEST MODULE.  CORRECT
0000    ; OPERATION OF EACH SERVICE FOR EACH OF ITS ISSUANCES IS VERIFIED BY
0000    ; CHECKING FOR AN SS$_NORMAL STATUS CODE, EXPECTED RETURN ARGUMENTS
0000    ; AND EXPECTED FUNCTIONALITY PERFORMED.
0000    ;
0000    ; ENVIRONMENT:  USER MODE IMAGE; NEEDS CMKRNL PRIVILEGE,
0000    ;               DYNAMICALLY ACQUIRES OTHER PRIVILEGES, AS NEEDED.
0000    ;
0000    ; AUTHOR: THOMAS L. CAFARELLA,         CREATION DATE: APR, 1978
0000    ;
0000    ; MODIFIED BY:
0000    ;
0000    ;       . : VERSION
0000    ; 01    -
0000    ;--
```

```
        0000     54          .SBTTL  DECLARATIONS
        0000     55 ;
        0000     56 ; INCLUDE FILES:
        0000     57 ;
        0000     58          $PRVDEF                         ; PRIVILEGE BIT DEFINITIONS
        0000     59          $PHDDEF                         ; PROCESS HEADER OFFSETS
        0000     60          $PSLDEF                         ; PROCESSOR STATUS LONGWORD DEFINITIONS
        0000     61 ;
        0000     62 ; MACROS:
        0000     63 ;
        0000     64 ;
        0000     65 ; EQUATED SYMBOLS:
        0000     66 ;
        0000     67 ;
        0000     68 ; OWN STORAGE:
        0000     69 ;
```

```
00000000                  .PSECT  RODATA,RD,NOWRT,NOEXE,LONG
    0000  TEST_MOD_NAME::  STRING  C,<SATSSS78>     ; TEST MODULE NAME
    0009  TEST_MOD_NAME_D: STRING  I,<SATSSS78>     ; TEST MODULE NAME DESCRIPTOR
    0019  MSG1_INP_CTL:    STRING  I,<  SSLUW!4ZW: CONDITIONS:>
    0039                                            ; FAO CTL STRING FOR MSG1 IN SUCCOMMON.MAR
    0039  MSG3_ERR_CTL::   STRING  I,< *SSLUW!4ZW: !AS>
    0051                                            ; FAO CTL STRING FOR MSG3 IN SUCCOMMON.MAR
```

```
          00000000    79             .PSECT  RWDATA,RD,WRT,NOEXE,LONG
00000008  0000        80 PRIVMASK:           .BLKQ    1                 ; ADDR OF PRIVILEGE MASK (IN PHD)
0000000C  0008        81 PAGCNT_ERG:         .BLKL    1                 ; PAGCNT ARGUMENT FOR EXPREG
00000010  000C        82 REGION_ERG:         .BLKL    1                 ; REGION ARGUMENT FOR EXPREG
00000018  0010        83 RETADR:             .BLKQ    1                 ; RETADR ARG FOR SUBJ $LKWSET & $ULWSET
```

```
                                      0018    85        .SBTTL  CONDITION TABLES
                                      0018    86 ;
                                      0018    87 ;      ***** CONDITION TABLES FOR LKWSET/ULWSET SYSTEM SERVICES *****
                                      0018    88 ;
                                      0018    89        COND    1,QUAD,<INADR>,-
                                      0018    90                <CURRENT IMAGE PAGE>,-
                                      0018    91                <PROGRAM REGION -- SINGLE PAGE>,-
                                      0018    92                <PROGRAM REGION -- MULTIPLE PAGES>,-
                                      0018    93                <CONTROL REGION -- SINGLE PAGE>,-
                                      0018    94                <CONTROL REGION -- MULTIPLE PAGES>,-
                                      0018    95
                   00000000'00000000' 00C4    96                .LONG           TM_SETUP,TM_SETUP
 00000000'00000000'00000000'00000000' 00CC    97                .LONG           0[8]
 00000000'00000000'00000000'00000000' 00DC
                                      00EC    98 ;
                                      00EC    99        COND    2,NOTARG,<PAGE OWNER ACCESS MODE>,-
                                      00EC   100                <KERNEL>,-
                                      00EC   101                <EXECUTIVE>,-
                                      00EC   102                <SUPERVISOR>,-
                                      00EC   103                <USER>,-
                                      00EC   104
                             00000000 0135   105                .LONG           PSL$C_KERNEL
                             00000001 0139   106                .LONG           PSL$C_EXEC
                             00000002 013D   107                .LONG           PSL$C_SUPER
                             00000003 0141   108                .LONG           PSL$C_USER
                                      0145   109 ;
                                      0145   110        COND    3,LONG,<ACMODE>,-
                                      0145   111                <KERNEL>,-
                                      0145   112                <EXECUTIVE>,-
                                      0145   113                <SUPERVISOR>,-
                                      0145   114                <USER>,-
                                      0145   115
                             00000000 017E   116                .LONG           PSL$C_KERNEL
                             00000001 0182   117                .LONG           PSL$C_EXEC
                             00000002 0186   118                .LONG           PSL$C_SUPER
                             00000003 018A   119                .LONG           PSL$C_USER
                                      018E   120 ;
                                      018E   121        COND    4,NULL
                                      018F   122
                                      018F   123        COND    5,NULL
                                      0190   124
                             00000000        125        .PSECT  SATSSS78,RD,WRT,EXE
```

```
                                  0000   127          .SBTTL  TM_SETUP, TM_CLEANUP
                                  0000   128 ;++
                                  0000   129 ; FUNCTIONAL DESCRIPTION:
                                  0000   130 ;
                                  0000   131 ;                TM_SETUP AND TM_CLEANUP ARE CALLED TO PERFORM
                                  0000   132 ; REQUIRED HOUSEKEEPING AT THE BEGINNING AND END, RESPECTIVELY, OF
                                  0000   133 ; TEST MODULE EXECUTION.
                                  0000   134 ;
                                  0000   135 ; CALLING SEQUENCE:
                                  0000   136 ;
                                  0000   137 ;        BSBW TM_SETUP   BSBW TM_CLEANUP
                                  0000   138 ;
                                  0000   139 ; INPUT PARAMETERS:
                                  0000   140 ;
                                  0000   141 ;        NONE
                                  0000   142 ;
                                  0000   143 ; IMPLICIT INPUTS:
                                  0000   144 ;
                                  0000   145 ;        NONE
                                  0000   146 ;
                                  0000   147 ; OUTPUT PARAMETERS:
                                  0000   148 ;
                                  0000   149 ;        NONE
                                  0000   150 ;
                                  0000   151 ; IMPLICIT OUTPUTS:
                                  0000   152 ;
                                  0000   153 ;        TM_SETUP:  COND TABLE INDEX REGISTERS (R2,3,4,5,6) CLEARED;
                                  0000   154 ;                   ALL PRIVILEGES ACQUIRED.
                                  0000   155 ;
                                  0000   156 ; COMPLETION CODES:
                                  0000   157 ;
                                  0000   158 ;        EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
                                  0000   159 ;
                                  0000   160 ; SIDE EFFECTS:
                                  0000   161 ;
                                  0000   162 ;        SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
                                  0000   163 ;        (VIA RSB) IF ERROR ENCOUNTERED.
                                  0000   164 ;
                                  0000   165 ;--
                                  0000   166
                                  0000   167
                                  0000   168
                                  0000   169 TM_SETUP::
                        52   D4   0000   170          CLRL    R2                             ; INITIALIZE
                        53   D4   0002   171          CLRL    R3                             ; .. CONDITION
                        54   D4   0004   172          CLRL    R4                             ; .... TABLE
                        55   D4   0006   173          CLRL    R5                             ; ...... INDEX
                        56   D4   0008   174          CLRL    R6                             ; ........ REGISTERS
                     FFF3'   30   000A   175          BSBW    MOD_MSG_PRINT                  ; PRINT TEST MODULE BEGIN MSG
 00000000'EF   00000000'EF   DE   000D   176          MOVAL   TEST_MOD_SUCC,TMD_ADDR         ; ASSUME END MSG WILL SHOW SUCCESS
      03   00  00000000'8F   F0   0018   177          INSV    #SUCCESS,#0,#3,MOD_MSG_CODE ; ADJUST STATUS CODE FOR SUCCESS
               00000000'EF        0020
                                  0025   178          MODE    TO,5$,KRNL                     ; KERNEL MODE TO ACCESS PHD
          59   00000000'9F   D0   0048   179          MOVL    @#CTL$GL_PHD,R9                ; GET PROCESS HEADER ADDRESS
     00000000'EF        69   DE   004F   180          MOVAL   PHD$Q_PRIVMSK(R9),PRIVMASK ; GET PRIV MASK ADDRESS
                                  0056   181          MODE    FROM,5$ ; BACK TO USER MODE
                                  0057   182          PRIV    ADD,ALL                        ; GET ALL PRIVILEGES
                        0077   183             $SETPRN_S TEST_MOD_NAME_D            ; SET PROCESS NAME
                        0084   184             SS_CHECK  NORMAL                     ; CHECK STATUS CODE RETURNED FROM SETPRN
                   05   00B2   185             RSB                                  ; RETURN TO MAIN ROUTINE
                        00B3   186 TM_CLEANUP::
           FF4A'   30   00B3   187             BSBW     MOD_MSG_PRINT               ; PRINT TEST MODULE END MSG
                   05   00B6   188             RSB                                  ; RETURN TO MAIN ROUTINE
```

```
                         00B7            .SBTTL  CONDITION SUBROUTINES - SETUP AND CLEANUP
                         00B7      ;++
                         00B7      ; FUNCTIONAL DESCRIPTION:
                         00B7      ;
                         00B7      ;              CONDX AND CONDX_CLEANUP ARE SUBROUTINES WHICH ARE EXECUTED
                         00B7      ; BEFORE AND AFTER THE VERIFY SUBROUTINE, RESPECTIVELY, WHENEVER A NEW
                         00B7      ; CONDITION X VALUE IS SELECTED (SEE FUNCTIONAL DESCRIPTION OF SUCCOMMON
                         00B7      ; ROUTINE IN SUCCOMMON.MAR). ANY SETUP FUNCTION PARTICULAR TO THE
                         00B7      ; CONDITION X TABLE IS INCLUDED IN THE CONDX SUBROUTINE AND CLEANED
                         00B7      ; UP, IF NECESSARY, IN THE CONDX_CLEANUP SUBROUTINE. THIS INCLUDES,
                         00B7      ; ESPECIALLY, CODE TO DETECT CONFLICTS AMONG CURRENT ENTRIES IN TWO
                         00B7      ; OR MORE CONDITION TABLES. IF A CONFLICT IS DETECTED, A NON-ZERO
                         00B7      ; VALUE IS STORED INTO CONFLICT, WHICH CAUSES THE CALLING ROUTINE
                         00B7      ; (SUCCOMMON) TO SKIP THE CURRENT ENTRY IN THE CONDITION X TABLE.
                         00B7      ;
                         00B7      ; CALLING SEQUENCE:
                         00B7      ;
                         00B7      ;       BSBW CONDX   BSBW CONDX_CLEANUP
                         00B7      ;         WHERE X = 1,2,3,4,5
                         00B7      ;
                         00B7      ; INPUT PARAMETERS:
                         00B7      ;
                         00B7      ;       CONFLICT = 0
                         00B7      ;
                         00B7      ; IMPLICIT INPUTS:
                         00B7      ;
                         00B7      ;       R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
                         00B7      ;         FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
                         00B7      ;
                         00B7      ; OUTPUT PARAMETERS:
                         00B7      ;
                         00B7      ;       CONFLICT SET TO NON-ZERO IF COND TABLE CONFLICT DETECTED.
                         00B7      ;
                         00B7      ; IMPLICIT OUTPUTS:
                         00B7      ;
                         00B7      ;       R2,3,4,5,6 PRESERVED
                         00B7      ;
                         00B7      ; COMPLETION CODES:
                         00B7      ;
                         00B7      ;       NONE
                         00B7      ;
                         00B7      ; SIDE EFFECTS:
                         00B7      ;
                         00B7      ;       NONE
                         00B7      ;
                         00B7      ;--
                         00B7
                         00B7
                         00B7
                         00B7      COND1::
                     05  00B7            RSB                           ; RETURN TO MAIN ROUTINE
                         00B8      COND1_CLEANUP::
                     05  00B8            RSB                           ; RETURN TO MAIN ROUTINE
                         00B9      COND2::
                 52  D5  00B9            TSTL    R2                    ; FIRST COND 1 ELEMENT ??
                 15  12  00BB            BNEQ    COND2X                ; NO -- NO CONFLICT
03  00000135'EF43    D1  00BD            CMPL    COND2_E[R3],#PSL$C_USER ; IS PAGE-OWNER USER MODE ??
```

```
                         0B   13  00C5   247            BEQL    COND2X                     ; YES -- NO CONFLICT
    00000000'EF   00000000'EF   90  00C7   248            MOVB    ONES,CONFLICT              ; NO -- INDICATE CONFLICT BECAUSE ...
                                    00D2   249                                               ; ... CURRENT IMAGE PAGE MUST BE USER
                                    00D2   250 COND2X:
                              05    00D2   251            RSB                                ; RETURN TO MAIN ROUTINE
                                    00D3   252 COND2_CLEANUP::
                              05    00D3   253            RSB                                ; RETURN TO MAIN ROUTINE
                                    00D4   254 COND3::
  00000135'EF43  0000017E'EF44  D1  00D4   255            CMPL    ACMODE[R4],COND2_E[R3]     ; IS LOCKER AT LEAST AS ...
                                    00E1   256                                               ; ... PRIVILEGED AS OWNER ??
                         0B   15  00E1   257            BLEQ    COND3X                     ; YES -- THAT'S OK
    00000000'EF   00000000'EF   90  00E3   258            MOVB    ONES,CONFLICT              ; NO -- INDICATE CONFLICT
                                    00EE   259 COND3X:
                              05    00EE   260            RSB                                ; RETURN TO MAIN ROUTINE
                                    00EF   261 COND3_CLEANUP::
                              05    00EF   262            RSB                                ; RETURN TO MAIN ROUTINE
                                    00F0   263 COND4::
                              05    00F0   264            RSB                                ; RETURN TO MAIN ROUTINE
                                    00F1   265 COND4_CLEANUP::
                              05    00F1   266            RSB                                ; RETURN TO MAIN ROUTINE
                                    00F2   267 COND5::
                              05    00F2   268            RSB                                ; RETURN TO MAIN ROUTINE
                                    00F3   269 COND5_CLEANUP::
                              05    00F3   270            RSB                                ; RETURN TO MAIN ROUTINE
```

```
                                 00F4          .SBTTL  FORM_CONDS
                                 00F4   ;++
                                 00F4   ; FUNCTIONAL DESCRIPTION:
                                 00F4   ;
                                 00F4   ;               FORM_CONDS FORMATS AND PRINTS INFORMATION ABOUT
                                 00F4   ;  THE CURRENT ELEMENT IN EACH OF THE CONDITION TABLES.
                                 00F4   ;
                                 00F4   ; CALLING SEQUENCE:
                                 00F4   ;
                                 00F4   ;       BSBW FORM_CONDS
                                 00F4   ;
                                 00F4   ; INPUT PARAMETERS:
                                 00F4   ;
                                 00F4   ;       NONE
                                 00F4   ;
                                 00F4   ; IMPLICIT INPUTS:
                                 00F4   ;
                                 00F4   ;       R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
                                 00F4   ;         FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
                                 00F4   ;       FOR X = 1,2,3,4,5 :
                                 00F4   ;               CONDX_T - TITLE TEXT FOR CONDX TABLE
                                 00F4   ;               CONDX_TAB - ELEMENT TEXT FOR CONDX TABLE
                                 00F4   ;               CONDX_C - CONTEXT OF THE CONDX TABLE
                                 00F4   ;               CONDX_E - DATA ELEMENTS OF THE CONDX TABLE
                                 00F4   ;
                                 00F4   ; OUTPUT PARAMETERS:
                                 00F4   ;
                                 00F4   ;       NONE
                                 00F4   ;
                                 00F4   ; IMPLICIT OUTPUTS:
                                 00F4   ;
                                 00F4   ;       NONE
                                 00F4   ;
                                 00F4   ; COMPLETION CODES:
                                 00F4   ;
                                 00F4   ;       NONE
                                 00F4   ;
                                 00F4   ; SIDE EFFECTS:
                                 00F4   ;
                                 00F4   ;       NONE
                                 00F4   ;
                                 00F4   ;--
                                 00F4
                                 00F4
                                 00F4
                                 00F4   FORM_CONDS::
                                 00F4           $FAO_S  MSG1_INP_CTL,FAO_LEN,FAO_DESC,TESTNUM
                                 0113                                           ; FORMAT CONDITIONS HEADER MSG
                    FEEA'   30   0113           BSBW    OUTPUT_MSG              ; ... AND PRINT IT
               14      08   91   0116           CMPB    #COND1_C,#NULL          ; IS CONDITION 1 NULL ?
                       03   12   0119           BNEQU   10$                     ; NO -- CONTINUE
                     00D7   31   011B           BRW     FORM_CONDSX             ; YES -- SUBROUTINE IS FINISHED
                                 011E   10$:
 00000000'EF   00000018'EF   DE  011E           MOVAL   COND1_T,MSG_A           ; SAVE ADDRESS OF CONDITION 1 TITLE FOR FAO
00000000'EF   0000001F'EF42  D0  0129           MOVL    COND1_TAB[R2],MSG_B     ; SAVE ADDR OF COND 1 CURR TEXT ELT FOR FAO
           00000000'EF   08  90  0135           MOVB    #COND1_C,MSG_CTXT       ; SAVE CONDITION 1 CONTEXT FOR FAO
                                 013C           MOV_VAL COND1_C,COND1_E[R2],MSG_DATA1 ; GIVE COND 1 DATA VALUE TO FAO
```

```
                   FEB5'  30  0148    329          BSBW     WRITE_MSG2                 ; FORMAT AND WRITE CONDITION 1 MSG
              14    00    91  014B    330          CMPB     #COND2_C,#NULL             ; IS CONDITION 2 NULL ?
                    03    12  014E    331          BNEQU    20$                        ; NO -- CONTINUE
                  00A2    31  0150    332          BRW      FORM_CONDSX                ; YES -- SUBROUTINE IS FINISHED
                              0153    333 20$:
  00000000'EF   000000EC'EF   DE  0153    334          MOVAL    COND2_T,MSG_A              ; SAVE ADDRESS OF CONDITION 2 TITLE FOR FAO
 00000000'EF  00000104'EF43   D0  015E    335          MOVL     COND2_TAB[R3],MSG_B        ; SAVE ADDR OF COND 2 CURR TEXT ELT FOR FAO
        00000000'EF     00    90  016A    336          MOVB     #COND2_C,MSG_CTXT          ; SAVE CONDITION 2 CONTEXT FOR FAO
                              0171    337          MOV_VAL  COND2_C,COND2_E[R3],MSG_DATA1 ; GIVE COND 2 DATA VALUE TO FAO
                   FE8C'  30  0171    338          BSBW     WRITE_MSG2                 ; FORMAT AND WRITE CONDITION 2 MSG
              14    04    91  0174    339          CMPB     #COND3_C,#NULL             ; IS CONDITION 3 NULL ?
                    03    12  0177    340          BNEQU    30$                        ; NO -- CONTINUE
                  0079    31  0179    341          BRW      FORM_CONDSX                ; YES -- SUBROUTINE IS FINISHED
                              017C    342 30$:
  00000000'EF   00000145'EF   DE  017C    343          MOVAL    COND3_T,MSG_A              ; SAVE ADDRESS OF CONDITION 3 TITLE FOR FAO
 00000000'EF  0000014D'EF44   D0  0187    344          MOVL     COND3_TAB[R4],MSG_B        ; SAVE ADDR OF COND 3 CURR TEXT ELT FOR FAO
        00000000'EF     04    90  0193    345          MOVB     #COND3_C,MSG_CTXT          ; SAVE CONDITION 3 CONTEXT FOR FAO
                              019A    346          MOV_VAL  COND3_C,COND3_E[R4],MSG_DATA1 ; GIVE COND 3 DATA VALUE TO FAO
                   FE57'  30  01A6    347          BSBW     WRITE_MSG2                 ; FORMAT AND WRITE CONDITION 3 MSG
              14    14    91  01A9    348          CMPB     #COND4_C,#NULL             ; IS CONDITION 4 NULL ?
                    47    13  01AC    349          BEQLU    FORM_CONDSX                ; YES -- SUBROUTINE IS FINISHED
  00000000'EF   0000018E'EF   DE  01AE    350          MOVAL    COND4_T,MSG_A              ; SAVE ADDRESS OF CONDITION 4 TITLE FOR FAO
 00000000'EF  0000018E'EF45   D0  01B9    351          MOVL     COND4_TAB[R5],MSG_B        ; SAVE ADDR OF COND 4 CURR TEXT ELT FOR FAO
        00000000'EF     14    90  01C5    352          MOVB     #COND4_C,MSG_CTXT          ; SAVE CONDITION 4 CONTEXT FOR FAO
                              01CC    353          MOV_VAL  COND4_C,COND4_E[R5],MSG_DATA1 ; GIVE COND 4 DATA VALUE TO FAO
                   FE31'  30  01CC    354          BSBW     WRITE_MSG2                 ; FORMAT AND WRITE CONDITION 4 MSG
              14    14    91  01CF    355          CMPB     #COND5_C,#NULL             ; IS CONDITION 5 NULL ?
                    21    13  01D2    356          BEQLU    FORM_CONDSX                ; YES -- SUBROUTINE IS FINISHED
  00000000'EF   0000018F'EF   DE  01D4    357          MOVAL    COND5_T,MSG_A              ; SAVE ADDRESS OF CONDITION 5 TITLE FOR FAO
 00000000'EF  0000018F'EF46   D0  01DF    358          MOVL     COND5_TAB[R6],MSG_B        ; SAVE ADDR OF COND 5 CURR TEXT ELT FOR FAO
        00000000'EF     14    90  01EB    359          MOVB     #COND5_C,MSG_CTXT          ; SAVE CONDITION 5 CONTEXT FOR FAO
                              01F2    360          MOV_VAL  COND5_C,COND5_E[R6],MSG_DATA1 ; GIVE COND 5 DATA VALUE TO FAO
                   FE0B'  30  01F2    361          BSBW     WRITE_MSG2                 ; FORMAT AND WRITE CONDITION 5 MSG
                              01F5    362 FORM_CONDSX:
                          05  01F5    363          RSB                                 ; RETURN TO CALLER
                    01F6   365          .SBTTL  VERIFY
                    01F6   366  ;++
                    01F6   367  ; FUNCTIONAL DESCRIPTION:
                    01F6   368  ;
                    01F6   369  ;               VERIFY IS CALLED ONCE FOR EACH COMBINATION OF CONDITION
                    01F6   370  ; TABLE VALUES (AS DETERMINED BY THE INDEX REGISTERS R2,3,4,5,6 FOR
                    01F6   371  ; COND TABLES 1,2,3,4,5, RESPECTIVELY). VERIFY ESTABLISHES THE CONDITIONS
                    01F6   372  ; SPECIFIED BY THE COND TABLES AND ISSUES THE SUBJECT SYSTEM SERVICES
                    01F6   373  ; ($LKWSET & $ULWSET). THEN, THE SUCCESSFUL OPERATION OF THE SERVICES IS
                    01F6   374  ; VERIFIED BY EXAMINING THE STATUS CODES RETURNED, THE VALUES FOR RETURN ARGS
                    01F6   375  ; AND THE FUNCTIONALITY PERFORMED. THE EXAMINATIONS TAKE THE FORM OF
                    01F6   376  ; COMPARISONS AGAINST EXPECTED VALUES. ANY FAILING COMPARISON CAUSES AN
                    01F6   377  ; ERR_EXIT MACRO TO BE EXECUTED (EITHER DIRECTLY, OR INDIRECTLY,
                    01F6   378  ; THROUGH THE SS_CHECK MACRO); ERR_EXIT SETS EFLAG TO NON-ZERO,
                    01F6   379  ; PRINTS ERROR MESSAGES AND CAUSES AN IMMEDIATE RSB TO CALLER.
                    01F6   380  ; WHEN ERR_EXIT IS EXECUTED, FURTHER CALLS TO VERIFY ARE SUPPRESSED,
                    01F6   381  ; AND, AFTER EXECUTING CLEANUP SUBROUTINES, THE IMAGE EXITS.
                    01F6   382  ;
                    01F6   383  ; CALLING SEQUENCE:
                    01F6   384  ;
                    01F6   385  ;       BSBW VERIFY
                    01F6   386  ;
                    01F6   387  ; INPUT PARAMETERS:
                    01F6   388  ;
                    01F6   389  ;       NONE
                    01F6   390  ;
                    01F6   391  ; IMPLICIT INPUTS:
                    01F6   392  ;
                    01F6   393  ;       R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
                    01F6   394  ;         FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
                    01F6   395  ;       FOR X = 1,2,3,4,5 :
                    01F6   396  ;               CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
                    01F6   397  ;                 TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
                    01F6   398  ;                 ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
                    01F6   399  ;                 FOR CONDX_E.
                    01F6   400  ;
                    01F6   401  ; OUTPUT PARAMETERS:
                    01F6   402  ;
                    01F6   403  ;       NONE
                    01F6   404  ;
                    01F6   405  ; IMPLICIT OUTPUTS:
                    01F6   406  ;
                    01F6   407  ;       VERIFY HAS NO OUTPUT. SINCE ITS PURPOSE IS TO TEST FOR ERRORS,
                    01F6   408  ;       IT MERELY RETURNS TO CALLER NORMALLY AFTER THE TESTS, PROVIDING
                    01F6   409  ;       ALL WERE SUCCESSFUL; IF AN ERROR IS DISCOVERED, RETURN IS VIA
                    01F6   410  ;       AN ERR_EXIT OR SS_CHECK MACRO, BOTH OF WHICH DOCUMENT DETECTED
                    01F6   411  ;       ERRORS.
                    01F6   412  ;
                    01F6   413  ; COMPLETION CODES:
                    01F6   414  ;
                    01F6   415  ;       EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
                    01F6   416  ;
                    01F6   417  ; SIDE EFFECTS:
                    01F6   418  ;
                    01F6   419  ;       SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
                    01F6   420  ;       (VIA RSB) IF ERROR ENCOUNTERED.
                    01F6   421  ;
```

```
                                01F6      ;--
                                01F6
                                01F6
                                01F6
                                01F6      VERIFY::
           00000000'EF    95    01F6              TSTB    CFLAG                           ; SHOULD CONDITIONS BE PRINTED ?
                   03     13    01FC              BEQL    5$                              ; NO -- CONTINUE
                 FEF3     30    01FE              BSBW    FORM_CONDS                      ; YES -- FMT & PRINT ALL CONDS FOR THIS T.C.
                                0201      5$:
                                0201      ;
                                0201      ; SET UP INADR ARGUMENT IN COND 1 TABLE BY ISSUING $EXPREG
                                0201      ;
                   52     D5    0201              TSTL    R2                              ; FIRST COND 1 ELEMENT ??
                   03     12    0203              BNEQ    10$                             ; NO -- CONTINUE
                 00A4     31    0205              BRW     40$                             ; YES -- INADR ALREADY SET UP
                                0208      10$:
         000000C4'EF42    7C    0208              CLRQ    INADR[R2]                       ; CLEAR $EXPREG RETURN AREA
           0000000C'EF    D4    020F              CLRL    REGION_ERG                      ; ASSUME PROGRAM REGION
      00000008'EF    01   9A    0215              MOVZBL  #1,PAGCNT_ERG                   ; ... AND SINGLE PAGE COUNT
              02     52   D1    021C              CMPL    R2,#2                           ; IS IT PROGRAM REGION ??
                     07   15    021F              BLEQ    15$                             ; YES -- GO CHECK PAGE COUNT
      0000000C'EF    01   9A    0221              MOVZBL  #1,REGION_ERG                   ; NO -- MUST BE CONTROL REGION
                                0228      15$:
              01     52   D1    0228              CMPL    R2,#1                           ; IS IT SINGLE PAGE ??
                     0C   13    022B              BEQL    20$                             ; YES -- GO ESTABLISH MODE
              03     52   D1    022D              CMPL    R2,#3                           ; COULD STILL BE SINGLE PAGE
                     07   13    0230              BEQL    20$                             ; IT IS -- GO ESTABLISH MODE
      00000008'EF    0A   9A    0232              MOVZBL  #10,PAGCNT_ERG                  ; MULTIPLE PAGES
                                0239      20$:
                                0239              MODE    TO,30$,KRNL                     ; GET KERNEL MODE, SO ACMODE ARG WORKS
                                025C              $EXPREG_S REGION=REGION_ERG, PAGCNT=PAGCNT_ERG, -
                                025C                      ACMODE=COND2_E[R3], RETADR=INADR[R2]
                                027D              MODE    FROM,30$                        ; BACK TO USER MODE
                                027E              SS_CHECK NORMAL                         ; CHECK FOR NORMAL STATUS RETURN
                                02AC      40$:
                                02AC      ;
                                02AC      ; ****** SYSTEM SERVICE CALLS WHICH ARE THE SUBJECT OF THIS TEST CASE ******
                                02AC      ;
                                02AC              MODE    TO,50$,KRNL                     ; GET KERNEL MODE, SO ACMODE ARG WORKS
                                02CF              $LKWSET_S INADR=INADR[R2], RETADR=RETADR,-
                                02CF                      ACMODE=ACMODE[R4]               ; ISSUE SUBJECT SERVICE
                                02EA              MODE    FROM,50$                        ; BACK TO USER MODE
      00000000'8F    50   D1    02EB              CMPL    R0,#SS$_WASCLR                  ; CODE RECEIVED = CODE EXPECTED ?
                     61   13    02F2              BEQLU   60$                             ; YES -- CONTINUE
 00000000'EF   00000000'8F   D0    02F4           MOVL    #SS$_WASCLR,EXPV                ; NO -- LOAD UP EXPECTED AND ...
      00000000'EF    50   D0    02FF              MOVL    R0,RECV                         ; ... RECEIVED VALUES, THEN EXIT
                                0306              ERR_EXIT LONG,<INCORRECT STATUS CODE RETURNED FROM LKWSET>
                                0355      60$:
                                0355      ;
                                0355      ; COMPARE INADR AGAINST RETADR (EXCEPT LOW-ORDER 9 BITS) AND,
                                0355      ; IF OK, GO ISSUE $ULWSET.
                                0355      ;
      57   000000C4'EF42  7D    0355              MOVQ    INADR[R2],R7                    ; GET INADR PAIR INTO REGS
        57    57    17    09  EF    035D          EXTZV   #9,#23,R7,R7                    ; SHIFT RIGHT 9 BITS
  57   00000010'EF   17   09  ED    0362          CMPZV   #9,#23,RETADR,R7                ; INADR = RETADR (FIRST OF PAIR) ??
                          13  12    036B          BNEQU   70$                             ; NO -- ERROR
     58    58     17      09  EF    036D          EXTZV   #9,#23,R8,R8                    ; SHIFT RIGHT 9 BITS
```

```
   58   00000014'EF    17    09  ED  0372    479            CMPZV   #9,#23,RETADR+4,R8         ; INADR = RETADR (2ND OF PAIR) ??
                             03  12  037B    480            BNEQU   70$                        ; NO -- ERROR
                           0068  31  037D    481            BRW     80$                        ; YES -- SKIP ERROR PROCESSING
                                     0380    482 70$:
  00000000'EF   000000C4'EF42    7D  0380    483            MOVQ    INADR[R2],EXPV             ; LOAD UP EXPECTED AND ...
    00000000'EF    00000010'EF   7D  038C    484            MOVQ    RETADR,RECV                ; ... RECEIVED VALUES, THEN EXIT
                                     0397    485            ERR_EXIT QUAD,<UNEXPECTED VALUE FROM LKWSET FOR>,-
                                     0397    486                            < RETADR PAIR>
                                     03E8    487 80$:
                                     03E8    488 ;
                                     03E8    489 ; SET UP TO ISSUE $ULWSET
                                     03E8    490 ;
                                     03E8    491            MODE    TO,90$,KRNL                ; GET KERNEL MODE, SO ACMODE ARG WORKS
                                     040B    492            $ULWSET_S INADR=INADR[R2], RETADR=RETADR,-
                                     040B    493                    ACMODE=ACMODE[R4]          ; ISSUE SUBJECT SERVICE
                                     0426    494            MODE    FROM,90$                   ; BACK TO USER MODE
            00000000'8F      50  D1  0427    495            CMPL    R0,#SS$_WASSET             ; CODE RECEIVED = CODE EXPECTED ?
                             61  13  042E    496            BEQLU   100$                       ; YES -- CONTINUE
     00000000'EF   00000000'8F   D0  0430    497            MOVL    #SS$_WASSET,EXPV           ; NO -- LOAD UP EXPECTED AND ...
            00000000'EF      50  D0  043B    498            MOVL    R0,RECV                    ; ... RECEIVED VALUES, THEN EXIT
                                     0442    499            ERR_EXIT LONG,<INCORRECT STATUS CODE RETURNED FROM ULWSET>
                                     0491    500 100$:
                                     0491    501 ;
                                     0491    502 ; COMPARE INADR AGAINST RETADR (EXCEPT LOW-ORDER 9 BITS) AND,
                                     0491    503 ; IF OK, VERIFY ROUTINE IS COMPLETE, GO DO ANOTHER TEST CASE.
                                     0491    504 ;
            57   000000C4'EF42   7D  0491    505            MOVQ    INADR[R2],R7               ; GET INADR PAIR INTO REGS
              57     57    17    09  EF  0499    506            EXTZV   #9,#23,R7,R7               ; SHIFT RIGHT 9 BITS
   57   00000010'EF    17    09  ED  049E    507            CMPZV   #9,#23,RETADR,R7           ; INADR = RETADR (FIRST OF PAIR) ??
                             13  12  04A7    508            BNEQU   110$                       ; NO -- ERROR
              58     58    17    09  EF  04A9    509            EXTZV   #9,#23,R8,R8               ; SHIFT RIGHT 9 BITS
   58   00000014'EF    17    09  ED  04AE    510            CMPZV   #9,#23,RETADR+4,R8         ; INADR = RETADR (2ND OF PAIR) ??
                             03  12  04B7    511            BNEQU   110$                       ; NO -- ERROR
                           0068  31  04B9    512            BRW     VERIFYX                    ; YES -- SKIP ERROR PROCESSING
                                     04BC    513 110$:
  00000000'EF   000000C4'EF42    7D  04BC    514            MOVQ    INADR[R2],EXPV             ; LOAD UP EXPECTED AND ...
    00000000'EF    00000010'EF   7D  04C8    515            MOVQ    RETADR,RECV                ; ... RECEIVED VALUES, THEN EXIT
                                     04D3    516            ERR_EXIT QUAD,<UNEXPECTED VALUE FROM ULWSET FOR>,-
                                     04D3    517                            < RETADR PAIR>
                                     0524    518 VERIFYX:
                                 05  0524    519            RSB                                ; RETURN TO CALLER
```

```
                 0525        .SBTTL  VFY_CLEANUP
                 0525  ;++
                 0525  ; FUNCTIONAL DESCRIPTION:
                 0525  ;
                 0525  ;             VFY_CLEANUP EXECUTES SYSTEM SERVICES TO UNDO THE
                 0525  ; EFFECT OF THOSE ISSUED IN THE VERIFY SUBROUTINE. VFY_CLEANUP MUST
                 0525  ; ASSUME THAT VERIFY MAY NOT HAVE EXECUTED IN ITS ENTIRETY (IF AN
                 0525  ; ERROR IS FOUND). ALSO, VFY_CLEANUP MAY ISSUE SS_CHECK OR ERR_EXIT
                 0525  ; ONLY AFTER PERFORMING ALL OF ITS CLEANUP OPERATIONS; THIS IS REQUIRED
                 0525  ; IN THE EVENT THAT VFY_CLEANUP IS CALLED DURING ERROR PROCESSING,
                 0525  ; WHEN PERFORMING THE REQUIRED CLEANUP IS MORE IMPORTANT THAN
                 0525  ; POSSIBLY DISCOVERING A SECOND ERROR.
                 0525  ;
                 0525  ; CALLING SEQUENCE:
                 0525  ;
                 0525  ;       BSBW VFY_CLEANUP
                 0525  ;
                 0525  ; INPUT PARAMETERS:
                 0525  ;
                 0525  ;       NONE
                 0525  ;
                 0525  ; IMPLICIT INPUTS:
                 0525  ;
                 0525  ;       R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
                 0525  ;         FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
                 0525  ;       FOR X = 1,2,3,4,5 :
                 0525  ;               CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
                 0525  ;                 TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
                 0525  ;                 ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
                 0525  ;                 FOR CONDX_E.
                 0525  ;
                 0525  ; OUTPUT PARAMETERS:
                 0525  ;
                 0525  ;       NONE
                 0525  ;
                 0525  ; IMPLICIT OUTPUTS:
                 0525  ;
                 0525  ;       NONE
                 0525  ;
                 0525  ; COMPLETION CODES:
                 0525  ;
                 0525  ;       EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
                 0525  ;
                 0525  ; SIDE EFFECTS:
                 0525  ;
                 0525  ;       SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
                 0525  ;       (VIA RSB) IF ERROR ENCOUNTERED.
                 0525  ;
                 0525  ;--
                 0525
                 0525
                 0525
                 0525  VFY_CLEANUP::
      52   D5    0525        TSTL    R2                      ; FIRST COND 1 ELEMENT ??
      03   12    0527        BNEQ    10$                     ; NO -- CONTINUE
    0078   31    0529        BRW     VFY_CLEANUPX            ; YES -- NO PAGES TO DELETE
                 052C  10$:
```

```
         57   000000C4'EF42   7D  052C   578           MOVQ     INADR[R2],R7              ; AVOID INDEX MODE, USE REGS
                         57   D5  0534   579           TSTL     R7                        ; DID $EXPREG GET SOME SPACE ABOVE ??
                         03   12  0536   580           BNEQU    20$                       ; YES -- CONTINUE
                       0069   31  0538   581           BRW      VFY_CLEANUPX              ; NO -- NO PAGES TO DELETE
                                  053B   582 20$:
                                  053B   583           MODE TO,30$,KRNL                   ; KRNL MODE TO DELETE ACQUIRED PAGES
                                  055E   584           $DELTVA_S INADR=INADR[R2], -
                                  055E   585                    ACMODE=COND2_E[R3]        ; .....
                                  0575   586           MODE FROM,30$                      ; BACK TO USER MODE
                                  0576   587           SS_CHECK NORMAL                    ; CHECK RETURN STATUS VALUE
                                  05A4   588 VFY_CLEANUPX:
                              05  05A4   589           RSB                                ; RETURN TO CALLER
                                  05A5   590           .END
```

```
$$$$                            = 000004DD R     04     EXPV                              ********* X  04
$$$CHARS                        = 0000002C              FAO_DESC                          ********* X  04
$$$CHARS1                       = 00000006              FAO_LEN                           ********* X  04
$$$CHARS2                       = 00000009              FORM_CONDS                        000000F4 RG  04
$$$CHARS3                       = 0000000A              FORM_CONDSX                       000001F5 R   04
$$$CHARS4                       = 00000004              INADR                             000000C4 R   03
$$$CHARS5                       = 00000000              LONG                            = 00000004  G
$$$COND_A                       = 00000003              MOD_MSG_CODE                      ********* X  04
$$$STRINGS                      = 00000001              MOD_MSG_PRINT                     ********* X  04
$$$STRINGS2                     = 00000005              MSG1_INP_CTL                      00000019 R   02
$$T1                            = 00000000              MSG3_ERR_CTL                      00000039 RG  02
$$T2                            = 00000004              MSG_A                             ********* X  04
ACMODE                            0000017E R     03     MSG_B                             ********* X  04
BYTE                            = 00000001  G           MSG_CTXT                          ********* X  04
CFLAG                             ********* X    04     MSG_DATA1                         ********* X  04
CHMRTN                            ********* X    04     NOTARG                          = 00000000  G
CHM_CONT                          ********* X    04     NULL                            = 00000014  G
COMP_SC                           ********* X    04     ONES                              ********* X  04
COND1                             000000B7 RG    04     OUTPUT_MSG                        ********* X  04
COND1_C                         = 00000008              PAGCNT_ERG                        00000008 R   03
COND1_CLEANUP                     000000B8 RG    04     PCV                               ********* X  04
COND1_E                           000000C4 R     03     PHD$Q_PRIVMSK                   = 00000000
COND1_H                           0000001E RG    03     PRIVMASK                          00000000 R   03
COND1_T                           00000018 R     03     PRIV_ARGS                       = 00000002
COND1_TAB                         0000001F R     03     PROCESS_ERR                       ********* X  04
COND2                             000000B9 RG    04     PSL$C_EXEC                      = 00000001
COND2X                            000000D2 R     04     PSL$C_KERNEL                    = 00000000
COND2_C                         = 00000000              PSL$C_SUPER                     = 00000002
COND2_CLEANUP                     000000D3 RG    04     PSL$C_USER                      = 00000003
COND2_E                           00000135 R     03     QUAD                            = 00000008  G
COND2_H                           00000103 RG    03     RECV                              ********* X  04
COND2_T                           000000EC R     03     REGION_ERG                        0000000C R   03
COND2_TAB                         00000104 R     03     REST_REGS                         ********* X  04
COND3                             000000D4 RG    04     RETADR                            00000010 R   03
COND3X                            000000EE R     04     SAVE_REGS                         ********* X  04
COND3_C                         = 00000004              SS$_NORMAL                        ********* X  04
COND3_CLEANUP                     000000EF RG    04     SS$_WASCLR                        ********* X  04
COND3_E                           0000017E R     03     SS$_WASSET                        ********* X  04
COND3_H                           0000014C RG    03     SUCCESS                           ********* X  04
COND3_T                           00000145 R     03     SYS$CMKRNL                        ********* GX 04
COND3_TAB                         0000014D R     03     SYS$DELTVA                        ********* GX 04
COND4                             000000F0 RG    04     SYS$EXPREG                        ********* GX 04
COND4_C                         = 00000014              SYS$FAO                           ********* X  04
COND4_CLEANUP                     000000F1 RG    04     SYS$LKWSET                        ********* GX 04
COND4_H                           0000018E RG    03     SYS$SETPRN                        ********* GX 04
COND4_T                           0000018E R     03     SYS$SETPRV                        ********* GX 04
COND4_TAB                         0000018E R     03     SYS$ULWSET                        ********* GX 04
COND5                             000000F2 RG    04     TESTNUM                           ********* X  04
COND5_C                         = 00000014              TEST_MOD_NAME                     00000000 RG  02
COND5_CLEANUP                     000000F3 RG    04     TEST_MOD_NAME_D                   00000009 R   02
COND5_H                           0000018F RG    03     TEST_MOD_SUCC                     ********* X  04
COND5_T                           0000018F R     03     TMD_ADDR                          ********* X  04
COND5_TAB                         0000018F R     03     TM_CLEANUP                        000000B3 RG  04
CONFLICT                          ********* X    04     TM_SETUP                          00000000 RG  04
CTL$GL_PHD                        ********* X    04     VERIFY                            000001F6 RG  04
DESC                            = 00000010  G           VERIFYX                           00000524 R   04
EFLAG                             ********* X    04     VFY_CLEANUP                       00000525 RG  04
```

```
VFY_CLEANUPX                     000005A4 R      04
WORD                           = 00000002  G
WRITE_MSG2                       ********   X    04

                                                +----------------+
                                                ! Psect synopsis !
                                                +----------------+

PSECT name                      Allocation          PSECT No.  Attributes
----------                      ----------          ---------  ----------
.  ABS  .                       00000000  (     0.)  00 (  0.)  NOPIC   USR   CON   ABS   LCL NOSHR NOEXE NORD   NOWRT NOVEC BYTE
$ABS$                           00000000  (     0.)  01 (  1.)  NOPIC   USR   CON   ABS   LCL NOSHR   EXE   RD     WRT NOVEC BYTE
RODATA                          00000051  (    81.)  02 (  2.)  NOPIC   USR   CON   REL   LCL NOSHR NOEXE   RD   NOWRT NOVEC LONG
RWDATA                          00000190  (   400.)  03 (  3.)  NOPIC   USR   CON   REL   LCL NOSHR NOEXE   RD     WRT NOVEC LONG
SATSSS78                        000005A5  (  1445.)  04 (  4.)  NOPIC   USR   CON   REL   LCL NOSHR   EXE   RD     WRT NOVEC BYTE

                                             +------------------------+
                                             ! Performance indicators !
                                             +------------------------+

Phase                    Page faults    CPU Time       Elapsed Time
-----                    -----------    --------       ------------
Initialization                    29    00:00:00.09    00:00:00.28
Command processing               108    00:00:00.68    00:00:01.69
Pass 1                           260    00:00:07.33    00:00:15.71
Symbol table sort                  0    00:00:00.55    00:00:01.10
Pass 2                           168    00:00:01.98    00:00:06.10
Symbol table output               18    00:00:00.11    00:00:00.31
Psect synopsis output              5    00:00:00.03    00:00:00.03
Cross-reference output             0    00:00:00.00    00:00:00.00
Assembler run totals             590    00:00:10.77    00:00:25.43

The working set limit was 900 pages.
38233 bytes (75 pages) of virtual memory were used to buffer the intermediate code.
There were 20 pages of symbol table space allocated to hold 346 non-local and 48 local symbols.
590 source lines were read in Pass 1, producing 24 object records in Pass 2.
37 pages of virtual memory were used to define 28 macros.

                                            +--------------------------+
                                            ! Macro library statistics !
                                            +--------------------------+

Macro library name                          Macros defined
------------------                          --------------
_$255$DUA28:[SHRLIB]UETP.MLB;1                           9
_$255$DUA28:[SYS.OBJ]LIB.MLB;1                           1
_$255$DUA28:[SYSLIB]STARLET.MLB;2                       15
TOTALS (all libraries)                                  25

671 GETS were required to define 25 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS$:SATSSS78/OBJ=OBJ$:SATSSS78 MSRC$:SATSSS78/UPDATE=(ENH$:SATSSS78)+EXECML$/LIB+SHRLIB$:UETP/LIB
```

0425 AH-BT13A-SE
VAX/VMS V4.0

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